

## REMARKS

Claims 37-39 and 45 have been canceled. Claims 1 and 31 have been amended to clarify the scope of these claims. In claims 1 and 31, the limitation “a filter covering said housing” has been amended to specify “a filter attached to said housing”. The intended meaning of the filter covering the housing is that the filter is attached to the housing rather than the cavity of the cartridge. This embodiment of the present invention is described on page 9, lines 1-3 of the present application. Claims 1 and 31 have further been amended to clarify that the housing (containing the sensor) is coupled to the cartridge as described on page 8, lines 15-17 of the PCT application. Claims 32 and 42 have been amended to clarify that the filter of the housing is exposed to the flow of gases.

Claims 1, 17, 26-36, 42 and 46-51 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over United States Patent No. 6,272,933 to Gradon in view of United States Patent No. 4,366,821 to Wittmaier et al. Reconsideration and withdrawal of the rejection is requested.

Neither Gradon nor Wittmaier disclose the arrangement of claims 1 and 31 wherein “a housing releasably containing said sensor, . . . a filter attached to said housing”. The filter and housing prevent contamination of the sensor so that the sensor may be reused between patients, while avoiding cross-contamination between the patients. The housing including filter can be disposed of appropriately (recycled), or the housing and filter can be sterilized for reuse. It is significantly easier to sterilize the housing and filter compared to sterilizing the delicate sensor device.

Applicants note the Examiner states it is possible to take sensors 34 and 35 of Gradon out of their housing. There is no such disclosure in Gradon. The Assignee of the present application

is the owner of United States Patent No. 6,272,933 to Gradon and the Assignee confirms that the sensor element 34, 35 cannot be released from their housings.

In Paragraphs 7 and 8 of the Final Office Action, the Examiner presents an extremely broad interpretation of claims 1 and 31. The Examiner has put forward an argument that the wording of claims 1 and 31 is intended to include a housing and sensor that may be released from the housing only by destroying the housing and/or sensor, the sensor otherwise not being releasable from the housing.

The Examiner bases this argument on the fact that the claim language does not explicitly state that the sensor must be functionally preserved. Applicants believe such a broad interpretation is clearly contrary to the plain meaning of the limitation. Clearly, the word "*releasable*" must mean the sensor can be released from the housing without damage to the sensor, otherwise the word releasable would be redundant in the claim.

The Examiner goes on to reference *In re Dulberg* and that the separation of elements where removability would be desirable, is a design consideration within the skill of the art. However, the present invention is not concerned with separating the elements of the prior art. The housing 25 is an additional element in the sensing device of the present invention when compared side-by-side with the prior art. The sensor 24 of the present invention is equivalent to the flow probe 19 of Gradon, which includes sensing means 34 and 35 and sensor housing means 32 and 33. The present invention relates to an additional housing that may, for example, releasably contain the flow probe 19 of Gradon. The additional housing could, for example, be coupled to the connector 42 of Gradon.

If the sensor were to be used in a first system providing humidified gases to a first patient, and a second system providing humidified gases to a second patient, the housing containing the sensor could be removed from the cartridge of the first system. The housing could be disposed of or set aside for sterilization and the sensor fitted to a new or previously used but sterilized housing before fitting into the cartridge of the second system. In this way, the present invention allows use of, for example, the sensor probe of Gradon, across a plurality of patients without cross-contamination.

Wittmaier also provides no disclosure of an additional housing 25 including filter in which a sensor may be releasably contained as described above.

Finally, the Examiner references one meaning for housing as given in *Webster's New World Dictionary*. Applicants refer the Examiner to another equally valid meaning for housing, that is, "a rigid casing that encloses and protects any piece of moving or delicate equipment" as defined in the *New Shorter Oxford English Dictionary*. A similar meaning may also be found in the Examiner's preferred *Webster's New World Dictionary* which the Examiner appears to have overlooked - see meaning number 6 of the copy of page 655 the Examiner provided with the Office Action.

As neither Gradon nor Wittmaier include a housing equivalent to the housing defined in the claims, Applicant submits that claims 1 and 31 are not rendered obvious. Reconsideration and allowance of claims 1 and 31 is requested.

Claims 17, 26-30, 32-36, 42 and 46-51 are dependent upon one of claims 1 or 31 which Applicants submit are allowable. Therefore, Applicants submit that claims 17, 26-30, 32-36, 42 and 46-51 are allowable. Reconsideration and allowance of claims 1 and 31 is requested.

The Examiner has further highlighted United States Patent No. 6,039,696 to Bell. In Bell, the membrane 18 is attached to the adapter 12 which is equivalent to the cartridge 11 of the present application. There is no disclosure of a sensor releasably contained in a housing including a filter attached to the housing, the housing being coupled to the adapter 12.

Replacement sheets for Figures 1, 9 and 10 are attached to overcome the Examiner's objection to the drawings. No new matter has been included. Entry is requested.

Applicants have concurrently submitted a Request for Continued Examination with this Amendment.

Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

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